THE AMERICAN SOCIETY FOR PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

This society, which was organized at Baltimore, December, 1908, held its first annual meeting in Boston during convocation week. The object of the society is to promote pharmacology and experimental therapeutics and to "facilitate personal intercourse between investigators who are actively engaged in research in these fields." The membership is now fifty-two.

At the business meeting on December 29 a constitution was adopted and the following officers elected:

President—J. J. Abel.

Secretary—Reid Hunt.

Treasurer—A. S. Loevenhart.

Additional Members of the Council—A. C. Crawford and G. B. Wallace.

Membership Committee—C. W. Edmunds, S. J. Meltzer and Torald Sollmann.

On December 30 a scientific session was held at which the following demonstrations and papers were presented and discussed:

DEMONSTRATIONS

D. R. Joseph and S. J. Meltzer: The mutual antagonism between magnesium and barium.

J. Auer (with P. Lewis): Demonstration of anaphylactic immobilization of the lungs in guinea-pigs.

W. H. Schultz: A simple respiration apparatus.

S. J. Meltzer: A demonstration of the method of respiration by continuous intratracheal insufflation.

PAPERS

Central Vasomotor Effects: T. Sollmann (with J. D. Pilcher).

An organ is left in connection with the vasomotor center, but separated from the circulation, and perfused artificially. Cardiac effects, and direct actions on the vessels, are thus excluded, thereby permitting the study of the activity of the vasomotor center. The response of this center to physiological and pharmacological conditions is under investigation; a number of the results were reported.

Studies upon the Action of Certain Salts on the Isolated Intestines: M. V. Tyrode.

Strips of rabbit's small and large intestines kept alive in the author's nutritive medium and tested by different methods showed an increased motor activity when magnesium sulphate, sodium sulphate and sodium phosphate were applied internally but decreased activity when these salts were applied externally, particularly well marked after magnesium sulphate.

On the Behavior of Certain Arsenical (and other) Compounds in the Treatment of Experimental Nagana: J. J. Abel (with L. G. Rowntree and E. A. Slegle).

The authors have met with success in the treatment of experimental nagana in using certain arsenical and antimony compounds, whose method of preparation together with results obtained will be described in detail in the near future.

The Effect of Certain Drugs upon the Toxicity of Acetphenetidin and Paramidophenol: W. Hale.

A control series of mice were fed plain cakes or upon cakes to which a single drug had been added, and the time until their death was noted. In a second series cakes were fed which contained a mixture of two of the above drugs. In this way it was shown that the toxicity of acetphenetidin (phenacetin) and para-amidophenol was increased in mixtures with small amounts of caffein, sodium bicarbonate and codeine.

On the Pharmacological Action and Antiseptic Value of Certain Benzoic Acid Derivatives: A. S. Loevenhart (with A. Arkin).

The following products were studied:

(1) Sodium ortho-iodbenzoate, $C_6H_4\begin{cases} I \\ COONa \end{cases}$

(2) Sodium ortho-iodosobenzoate, $C_6H_4\begin{cases} I{=}O \\ COONa \end{cases}$

(3) Sodium ortho-iodoxybenzoate, $C_6H_4\begin{cases} I\begin{cases} =O \\ =O \end{cases} \\ COONa \end{cases}$

The first has very little antiseptic action, while the second and third are antiseptics of considerable strength for the organisms studied. Evidence was presented to show that the germicidal properties of these substances is dependent upon the active oxygen combined with the iodine. The presence of protein did not diminish the antiseptic action of these substances. Work is under way to establish their therapeutic value.

The Effects of Urea and Hypertonic Solutions on the Circulation: J. A. E. Eyster. (Read by title.)

Urea causes an increase in the size of contraction of the frog's and terrapin's heart. Hypertonic solutions of sodium chloride and glucose exert a similar effect, but the effect with urea

occurs also in isotonic solution. Isotonic solutions of urea cause a slight constriction of the blood vessels of the frog, hypertonic solutions of urea and sodium chloride a dilation. Hypertonic solutions of urea, sodium chloride and glucose injected intravenously in cats and rabbits cause an increase in cardiac output and a vasodilatation of the intestinal and renal vessels.

The Biological and Chemical Assay of Ergot: H. C. WOOD, JR.

The method used for determining the activity of ergot physiologically was based on the rise of blood pressure, the average rise for ten minutes after the injection being taken as the physiological figures. Comparative tests having shown that the amount of benzol soluble matter in the fluid-extract of ergot bears a close relation to the physiological activity of the specimen, a method of chemical assay based on this fact was suggested. The body obtained by extracting the fluid-extract with benzole yields a nitrogenous body on prolonged shaking with dilute acids, which is highly active.

Inhibition of the Pancreas: C. W. EDMUNDS.

The pancreatic secretion produced by secretin is inhibited by the vaso-constricting action of adrenalin, nicotine, pituitary extract and strychnine. When these drugs do not cause vaso-constriction they do not inhibit the pancreas. After the injection of adrenalin the pancreas may not regain the normal volume for five minutes and with pituitary extract it may be eight minutes, which facts explain why the inhibition persists after the blood-pressure has returned to the normal height.

If the high blood-pressure produced by adrenalin is lowered by secretin to the normal height, or below, the inhibiting action of adrenalin is not removed because the lowering of the blood-pressure is due to weakening of the heart and not to vaso-dilation.

Barium chloride may inhibit or accelerate the pancreatic flow depending upon whether it constricts the pancreatic vessels or dilates them and thus increases the blood supply to the organ.

When the pancreas is stimulated by pilocarpine its activity is inhibited not only by adrenalin but also by fresh injections of pilocarpine provided the blood supply of the organ is lessened in amount by the slowing of the heart produced by the pilocarpine.

Strophanthin Absorption from the Gastro-intestinal Tract: R. A. HATCHER.

Strophanthin is not absorbed from the alimentary canal of the rat, and the absorption is extremely irregular in the cat and the dog, and apparently so in man.

Further Studies on the Influence of Alcohol on the Composition of Urine: W. SALANT (with C. H. HINKLE).

3 to 4 c.c. of ethyl alcohol, diluted to 50 per cent., fed to dogs by mouth caused diminished excretion of total nitrogen, phosphates, chlorides, total sulphur, total and inorganic sulphates. Conjugated sulphates and neutral sulphur were, on the contrary, increased.

The Toxicity of Caffein: W. SALANT (with J. B. RIEGER).

Resistance to caffein varies in different species of animals. Rabbits and guinea-pigs can stand much larger doses than cats, dogs or pigeons. The toxic dose of caffein by mouth in the rabbit is much greater than that given subcutaneously. Toxicity of caffein is greater when injected into the muscles, still greater when given intravenously. Chronic intoxication with caffein was induced by the administration of doses insufficient to induce acute symptoms and caused emaciation and loss of strength. Starvation diminished the resistance to caffein.

Tolerance for Caffein: W. SALANT (with J. B. RIEGER).

By the subcutaneous administration of gradually increasing doses at intervals of two to five days, cats survived quantities of caffein which were 60 to 70 per cent. greater than the fatal dose. Rabbits and dogs similarly treated stood smaller doses.

On the Use of Phenolsulphonephthalein in Estimating the Function of the Kidneys: L. G. ROWNTREE and J. T. GERAGHTY.

Phenolsulphonephthalein administered subcutaneously is excreted quantitatively in the urine; in health over 90 per cent. of a 3 to 12 mg. dose being recovered in two hours as estimated by the Duboscq colorimeter. In disease of one or both kidneys, the degree to which the function is impaired can be estimated by a decrease in the amount of drug excreted. The drug is non-toxic, non-irritant, and first appears inside of ten minutes and these small doses are entirely excreted in from two to two and a half hours.

On Insufflation of the Lungs with Hydrogen, Carbon Dioxide and Air: C. C. GUTHRIE. (Read by title.)

REID HUNT,
Secretary